

Serial No. 10/747,945

Docket No. HI-0177

Amdt. dated July 31, 2007

Reply to Office Action of May 2, 2007

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An iris recognition camera, comprising:
 - a driving barrel configured to support a lens;
 - a moving ~~unit~~device configured to reciprocatingly move the driving barrel to perform both focus and zoom operations; and
 - a position sensor configured to detect a position of the driving barrel within the system.
2. (Currently Amended) The iris recognition ~~sensor-camera~~ according to claim 1, wherein the moving ~~unit~~device comprises:
 - a motor; a lead screw connected to the motor at one end; and
 - a rack coupled to an outer circumference of the lead screw.
3. (Previously Presented) The iris recognition camera according to claim 2, wherein the motor comprises a step motor.

4. (Previously Presented) The iris recognition camera according to claim 1, wherein the driving barrel is provided at one side with a detecting portion configured to communicate with the position sensor so that the position sensor detects a position of the driving barrel.

5. (Previously Presented) The iris recognition camera according to claim 1, wherein the lens comprises a wide-angle lens.

6. (Previously Presented) The iris recognition camera according to claim 5, wherein the wide-angle lens has a focusing distance of about 11.8.+-.1 mm.

7. (Previously Presented) The iris recognition camera according to claim 1, further comprising one or more guide bars configured to guide the driving barrel during reciprocating movement.

8. (Previously Presented) The iris recognition camera according to claim 7, wherein the one or more guide bars comprises a pair of guide bars, respectively, positioned on opposite sides of the driving barrel.

9. (Previously Presented) The iris recognition camera according to claim 1, wherein the position sensor is positioned behind the lens.

10. (Previously Presented) The iris recognition camera according to claim 1, wherein the lens has an image pickup distance range of about 20-70 cm.

11. (Previously Presented) The iris recognition camera according to claim 1, wherein the position sensor comprises one of an optical sensor and a contact sensor.

12. (Previously Presented) An iris recognition system comprising the iris recognition camera of claim 1.

13.-19. (Canceled)

20. (Currently Amended) A method of operation for an iris recognition camera, comprising:

detecting a user;

moving a camera lens to an initial position detected by a position sensor after the position sensor detects the user;

thereafter moving the camera lens from the initial position to an image pickup location where a user's iris can be captured; and

performing the image pickup using an image pickup device.

21. (Previously Presented) The method according to claim 20, wherein the camera lens comprises a wide-angle lens.

22. (Previously Presented) The method according to claim 20, wherein the image pickup device comprises a charge-coupled device.

23. (Previously Presented) The method according to claim 20, wherein the iris recognition camera comprises a driving source for moving the lens in the form of a step motor.

24. (Previously Presented) The method according to claim 20, wherein the iris recognition camera further comprises a power transmission configured to transmit power for moving the camera lens.

25. (Previously Presented) The method according to claim 24, wherein the power transmission device includes a lead screw configured to be rotated by power from a driving source, and rack screw-coupled to an outer circumference of lead screw.

26. (Currently Amended) A method of operation for an iris recognition camera, comprising:

turning on power of an iris recognition camera;

moving a lens to an initial position;

detecting a user;

capturing an iris image of the user by moving the lens from the initial position to a location where the iris image is focused; and

storing a current location of the lens.

27. (Previously Presented) The method according to claim 26, wherein the initial position is detected by a position sensor.

28. (Previously Presented) The method according to claim 26, further comprising: comparing, when a new user is detected, the current location of the lens with an appropriate location for the lens for the new user;

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calculating a difference between the current location and the appropriate location;

and

moving the lens by the calculated difference to perform the image pickup.

29. (Previously Presented) The method according to claim 26, wherein the lens comprises a wide-angle lens.